

ISO 14001:2015 Awareness Training

Lesson 1: Introduction to ISO 14001:2015

Introduction

Welcome to “Introduction to ISO14001:2015”. In this lesson we will examine international standards and introduce ISO, the International Organisation for Standardisation. We will define a quality management system. Finally, we will introduce the ISO14000 family of standards.

International Standards

International Standards are the backbone of our society. They ensure the safety and quality of products and services, they facilitate international trade and improve the environment in which we live. ISO International Standards ensure that products and services are safe, reliable and of good quality. For businesses, they are strategic tools that reduce costs by minimising waste and errors and increase productivity. International standards help companies to access new markets, level the playing field with competitors and facilitate free and fair trade.

ISO, the International Organisation for Standardisation, is an independent, non-governmental international organisation with a membership of 161 national standards bodies. ISO was formed in 1947, and involves 3,368 technical bodies in standards development. Since 1947 ISO has published more than 21,000 standards, covering almost every aspect of business, technology and engineering.

The focus of this course is ISO 14001. To date, more than 300,000 companies in 170 countries have implemented ISO 14001. ISO 14000 is a family of international standards on environmental management, developed to help companies effectively manage the environmental system elements to be implemented to protect the environment. They are not specific to any one industry and can be applied to organisations of any size.

Environmental Management System

An environmental management system is a set of processes and practices that enable an organisation to reduce its environmental impacts and increase its operating efficiency.

More formally, EMS is "a system and database which integrates procedures and processes for training of personnel, monitoring, summarising, and reporting of specialised environmental performance information to internal and external stakeholders.

Environmental management systems serve many purposes, including:

- Improving customer satisfaction
- Improving processes
- Reducing waste
- Lowering costs
- Facilitating and identifying training opportunities
- Engaging staff
- Setting organisation-wide direction

ISO14000 Family of Standards

The ISO14000 family of standards consists of:

- **ISO 14001** Environmental management systems - Requirements with guidance for use
- **ISO 14004** Environmental management systems - General guidelines on implementation
- **ISO 14006** Environmental management systems - Guidelines for incorporating eco-design
- **ISO 14015** Environmental assessment of sites and organisations
- **ISO 14020** series (14020 to 14025) Environmental labels and declarations
- **ISO 14030** discusses post-production environmental assessment
- **ISO 14031** Environmental performance evaluation—Guidelines
- **ISO 14040** series (14040 to 14049), Life Cycle Assessment, LCA, discusses pre-production planning and environment goal setting.

- **ISO 14046** sets guidelines and requirements for water footprint assessments of products, processes, and organizations. Includes only air and soil emissions that impact water quality in the assessment.
- **ISO 14046** Environmental Management- Water Footprint- Principles, Requirements, and Guidelines
- **ISO 14050** terms and definitions
- **ISO 14062** Integrating environmental aspects into product design and development
- **ISO 14063** environmental communication guidelines and examples
- **ISO 14064** measuring, quantifying, and reducing greenhouse gas emissions
- **ISO 19011** specifies one audit protocol for both 14000 and 9000 series standards together

While each of these standards is important, ISO 14001:2015 is the only standard in the family to which companies and organisations can certify.

While ISO14001 was first developed in 1996, it has undergone periodic revision. The latest revision to the standard was in 2015. ISO 14001:2015 is based on the plan-do-check-act methodology and provides a process orientated approach to documenting and reviewing the structure, responsibilities, and processes required to achieve effective environmental management in an organisation.

Changes introduced in the 2015 revision are intended to ensure that ISO 14001 continues to adapt to the changing environments in which organisations operate. Some of the key updates in ISO 14001:2015 include the introduction of new terminology, restructuring some of the information, an emphasis on risk-based thinking to enhance the application of the process approach, improved applicability for services, and increased leadership requirements.

The introduction of a life cycle based perspective to products and services was also introduced in the 2015 revision. This puts greater emphasis on reviewing the organisations impact on the environment and where it has influence.

Summary

In this lesson, we examined international standards and introduced ISO, the International Organisation for Standardisation. We defined an environmental management system. Finally, we introduced the ISO14